

Pacific Northwest Hydrography Framework

Memorandum of Understanding

Between

The United States Department of the Interior Oregon/Washington Bureau of Land Management, United  
States Department of Agriculture (USDA) Forest Service Pacific Northwest Region, Oregon USDA  
Natural Resources Conservation Service, Washington USDA Natural Resources Conservation Service,  
State of Oregon, and the State of Washington

for the

Stewardship of the Pacific Northwest Research Station Hydrography Framework Hydrography Dataset  
In the States of Oregon and Washington

**January 14, 2009**



## **I. PURPOSE**

This Memorandum of Understanding (MOU), hereafter referred to as “the Agreement”, replaces the expired MOU that originally established the Pacific Northwest Hydrography Framework (PNWHF) Partnership in 2003. The content of the Agreement is updated to better reflect the current status and desired future of the partnership. The Natural Resources Conservation Service (NRCS) for Oregon and Washington joins the original PNWHF Partners: the United States Department of the Interior (USDI) Bureau of Land Management (BLM), the U.S. Forest Service Pacific Northwest Region (USFS), and the States of Oregon and Washington as represented by the coordinating agency within each state.

The Agreement describes the activities that the partners agree to undertake in order to cooperatively provide stewardship for key water-related Geographic Information System (GIS) datasets in Oregon and Washington. These initially include the National Hydrography Dataset (NHD) and the Watershed Boundary Dataset (WBD), but additional datasets may be added in the future with the agreement of the PNWHF Partners.

For the purposes of this Agreement, the NHD and WBD datasets will be considered together and referred to as the “Hydrography Dataset.” This follows a decision by the national stewards for these datasets, the U.S. Geological Survey (USGS) for the NHD and the Natural Resources Conservation Service (NRCS) for the WBD, to integrate the datasets into a single GIS data model. It is anticipated that full integration of the datasets will not occur until Federal fiscal year 2010. This Agreement provides guidance for the stewardship of these datasets in both their stand-alone and fully integrated forms.

Under the Agreement, the PNWHF Partners agree to maintain, update, and improve the Hydrography Dataset, based on their business needs. This Agreement provides a clear statement of the approach for both in-state and regional stewardship. This then provides a framework for more effective cooperation with our national partners on implementing an integrated stewardship strategy.

## **II. BACKGROUND**

The NHD is a comprehensive set of digital spatial data representing surface water features, and it provides a system for linking to partner-specific attribute information. The PNWHF Partners entered into an NHD Stewardship Agreement with the USGS at the national level in 2007 in order to identify the activities that the PNWHF and the USGS will undertake to collaboratively steward the NHD in Oregon and Washington. Migration of the legacy Oregon/Washington (LLID-based) PNWHF hydrography dataset to the NHD format was completed in 2008 and it is now available for maintenance upon the agreement of the partners.

The WBD is a set of hydrologic unit boundaries that adhere to national guidelines and are mapped to the 5<sup>th</sup> and 6<sup>th</sup> level watersheds and sub-watersheds. The PNWHF adds additional subdivisions (7<sup>th</sup> and 8<sup>th</sup> level) within this dataset to meet agency-specific requirements. The dataset, at the 5<sup>th</sup> and 6<sup>th</sup> level, has recently passed national certification for both Oregon and Washington. The WBD boundaries serve as important analysis and reporting units for the PNWHF Partners.

This Agreement recognizes that the partners may have overlapping responsibilities on the lands within the two states. Some partners may have land management responsibilities while others may have regulatory responsibility on the same lands. The partners recognize the potential for overlap of stewardship responsibilities in these situations and endeavor to work together so that the needs of all partners are met.

### **III. SCOPE**

This Agreement outlines a partnership strategy to implement comprehensive stewardship of the Hydrography Dataset that encompasses the States of Oregon and Washington. Cooperation under this new Agreement is the natural extension of the PNWHF multi-year strategy to develop a complete and accurate Hydrography Dataset that can be effectively maintained by the partner organizations. It describes the PNWHF Partnership whose members are the authoritative Data Stewards with primary responsibility for these datasets. The Agreement describes the relationship between the PNWHF and the national stewards, USGS and NRCS, with whom the PNWHF is working to implement a comprehensive stewardship strategy. High level descriptions of the PNWHF stewardship responsibilities are provided below and in more detail within Appendix A.

### **IV. AUTHORITIES**

1. BLM is authorized under the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1737) to enter into cooperative agreements involving management, protection, and development of public lands (Section 307b).
2. The Paperwork Reduction Act (44 U.S.C. 3501) requires agencies to minimize the cost to the Federal government of collecting, maintaining, using, and disseminating information.
3. Office of Management of Budget Circular A-130 requires the Federal government to plan for open and efficient exchange of government information and to seek to satisfy new information needs through legally authorized interagency or intergovernmental sharing of information.
4. Firmware Support Manual 1500, 1586.01, is the authority that allows issuance of this MOU for the USFS.
5. The Federal Records Act of 1950, 44 U.S.C. Chapters 21, 29, 31, and 33.
6. Office of Management and Budget Circular A-130, Management of Federal Information Resources.
7. Code of Federal Regulations Title 36, Chapter 12, to comply with the regulations of the National Archives and Records Administration and General Services Administration, CFR Title 41, Chapter 201.
8. Revised code of Washington 79.10.280; directs all Washington State agencies to cooperate to the fullest extent in the expansion and maintenance of a state-wide land use data bank making maximum use of computerized storage and retrieval technology.

### **V. RESPONSIBILITIES AND PROCEDURES**

#### **Roles and Responsibilities:**

Stewardship roles and responsibilities, under this Agreement, apply to all PNWHF Partners. Even though the hydrography stewardship roles may reside in separate and multiple organizations within the two states, PNWHF Partners will cooperate to ensure data integrity and completeness. In effect, separate NHD and WBD Stewards will function as one entity in order to effectively fulfill overall stewardship.

The PNWHF Partners agree to fulfill the following stewardship roles:

General Roles and Responsibilities:

- Serve as the data stewards for their geographic areas of responsibility recognizing that overlapping stewardship responsibilities may exist between land management and regulatory partner organizations. Adopt and promote a cooperative and integrative approach to stewardship of the Hydrography Dataset.
- Work with partner organizations to reach consensus on data stewardship issues in areas of intermingled ownership of lands and overlapping regulatory responsibilities.
- Make planned edits available for review by other stewards who may be affected by the proposed edits, according to the defined roles and responsibilities provided in Appendix A.
- Ensure strong working relationships that promote integration of the NHD and WBD both vertically and horizontally across jurisdictions.
- Work with other in-state stewards to provide publicly available information on status of data stewardship activities.

Relationship of PNWHF Partners to other organizations within Oregon and Washington:

- Coordinate with other Federal and in-state agencies, inter-agency organizations, adjacent states, Native American tribal organizations and entities, counties, and other local governmental organizations to identify and provide programmatic coordination on data development and maintenance activities.
- Maintain an awareness of the activities of other agencies and organizations involved in stewardship in order to include all applicable input for a given area.
- Coordinate with Oregon and Washington USGS Liaisons.

Relationship of PNWHF Partners to National Stewards:

- Act as Point of Contact for the national stewards, USGS and NRCS.
- Collaborate with the USGS and NRCS on proposed edits originating at the national level.
- Adhere to agreed-upon transaction process workflows for transactions upon the Hydrography Dataset in the USGS repository.

Technical Support:

BLM provides a lead technical support role for the PNWHF. This support may include the following based on the mutual agreement of the Partners:

- Provide technical and administrative support to the data maintenance transaction process workflow.
- Provide quality assurance for changes to the datasets and work to resolve data conflicts.
- Provide and manage regional repository for the value-added Hydrography Dataset.
- Work with the USGS to ensure efficient and accurate refresh of the PNWHF regional repository following an agreed-upon refresh cycle.
- Facilitate education within the PNWHF region regarding use, access, and application of the Hydrography Dataset.

**Records Management:**

All Framework Partners will be responsible for documenting these data within their records inventories based on their agency-specific records policies. Disposition of the Hydrography Dataset records, supporting documentation, and metadata, according to the Federal Records Act and National Archives and Records Administration (NARA) guidelines, will be the responsibility of the BLM.

**Exclusive Right to Data:**

The Framework Partners agree that this Agreement does not confer an exclusive right to the data by any of the partners. All partners have equal access to the data. Partners are free to negotiate agreements to share or exchange the data with other parties.

**On-line Access:**

The Hydrography Dataset is available on-line from the national USGS and NRCS repositories. Individual PNWHF Partner organizations may download data directly from the national repositories for both maintenance and analysis purposes. Standard NHD downloads are available by individual Subbasin (4<sup>th</sup> Level) or Subregion (2<sup>nd</sup> Level) hydrologic units.

In addition, the USGS provides the following NHD exports from the national repository on an agreed-upon cycle for incorporation into the PNWHF Clearinghouse and internal partner operations: Oregon-wide, Washington-wide, and Oregon/Washington-wide datasets.

Based on PNWHF requirements, a value-added version of the Hydrography Dataset will be available for download from the PNWHF Clearinghouse server.

**Agreement:**

It is understood and agreed that: The PNWHF Partners will work collaboratively to create and maintain framework water-related datasets for the spatial extent of Oregon and Washington. Initially, these datasets include the NHD and the WBD, but other datasets may be added in the future upon approval of the partners.

Providing support to these stewardship activities will be a management emphasis for each Partner organization.

The NRCS will be primarily responsible for the WBD component of the Hydrography Dataset and will work with the NHD stewards to ensure vertical integration.

The partners agree to adopt the roles and responsibilities as described in the body of this Agreement as well as the more detailed roles and responsibilities provided in Appendix A. A high-level diagram for the PNWHF organization is provided in Appendix B.

No funds are exchanged under the authority of this Agreement; however, each partner organization will strive to provide support to PNWHF projects. Additional funding

agreements will be established to fund personnel, systems, software, application development, and telecommunications services needed to support the PNWHF Clearinghouse and related PHWHF projects.

**VI. IT IS MUTUALLY AGREED AND UNDERSTOOD BY AND BETWEEN THE SAID PARTIES THAT:**

1. Nothing in this Agreement will be construed as affecting the authorities of the participants or as binding beyond their respective authorities or to requiring of the participants to obligate or expend funds. Specific work projects or activities which involve the transfer of funds, services, or property between the parties to this Agreement will require the execution of separate agreements or contracts, contingent upon the availability of partner funds.
2. FREEDOM OF INFORMATION ACT (FOIA). Any information furnished to the Forest Service, BLM, and NRCS under this Agreement is subject to the Freedom of Information Act (5 U.S.C.552).
3. RCW 42.56.070 DOCUMENTS TO BE MADE AVAILABLE TO THE PUBLIC. Each Washington State agency shall make available for public inspection and copying all public records, unless the record falls within the specific exemptions.
4. OREGON OPEN RECORDS LAW. Oregon Revised Statute 192.420 (2007 ed). Right to inspect public records; notice to public body attorney. (1) Every person has a right to inspect any public record of a public body in this state, except as otherwise expressly provided by ORS 192.501 to 192.505.
5. MODIFICATION. Modifications to the scope of this Agreement shall be made by mutual consent of the parties, by the issuance of a written modification, signed and dated by all parties, prior to any changes being performed.
6. PARTICIPATION IN SIMILAR ACTIVITIES. This Agreement in no way restricts the PNWHF Partners from participating in similar activities with other public or private agencies, organizations, and individuals.
7. COMMENCEMENT/EXPIRATION DATE. This Agreement is executed as of the date of last signature and is effective through September 30, 2013, at which time it will expire, unless extended.
8. TERMINATION. Any of the parties, in writing, may terminate their participation in this Agreement in whole, or in part, at any time before the date of expiration.

**VII. PRINCIPAL CONTACTS** The principal contacts for this Agreement are:

**BLM Contact:**

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**Oregon USGS Contact:**

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svanhoff@usgs.gov

**VIII. NON-FUND OBLIGATING DOCUMENT**

This Agreement is neither a fiscal nor a funds obligation document. Any endeavor to transfer anything of value involving reimbursement or contribution of funds between the parties to this Agreement will be handled in accordance with applicable laws, regulations, and procedures including those for government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This Agreement does not provide such authority. Specifically, this Agreement does not establish authority for noncompetitive award to the cooperator of any contract or other agreement. Any contract or agreement for training or other services must fully comply with all applicable requirements for competition.



APPENDIX A Pacific Northwest Hydrography Framework Governance and  
Stewardship Roles and Responsibilities

APPENDIX B Pacific Northwest Hydrography Framework (PNWHF) Organizational  
Diagram

## **APPENDIX A PACIFIC NORTHWEST HYDROGRAPHY FRAMEWORK GOVERNANCE AND STEWARDSHIP ROLES AND RESPONSIBILITIES**

### **Background**

This document specifies the major roles and responsibilities that are required for successful management of the Hydrography Framework in Oregon and Washington. In many cases, the roles may be fulfilled by more than one organization or by different organizations at different levels of geography or jurisdiction within the region. Not all roles and responsibilities will apply to all partners and stewardship roles and responsibilities may be implemented in different ways in the various PNW Hydrography Framework (PNWHF) Partner organizations.

For the purpose of this document, the phrase “Hydrography Dataset” is inclusive of hydrographic features such as streams, lakes, and reservoirs as well as the hydrologic units such as watershed or subwatershed that encompass those features. Initially this encompasses the National Hydrography Dataset (NHD) and Watershed Boundary Dataset (WBD) for Oregon and Washington. A strong relationship exists between the PNWHF and the individual State Framework organizations. Roles defined below interact at appropriate levels within these state framework organizations.

Identified roles include those of Steering Committee, Agency Data Steward, Local Data Steward, State Coordinator, Hydrography Theme Management Board, Clearinghouse Administrator, Technical Advisory Committee, Executive Guidance/Sponsor, and Stakeholder.

This document uses the following definitions of Data Governance and Data Stewardship as guidance (Robert Seiner 2006 - <http://www.tdan.com/view-articles/5037>):

- *Data Governance: The execution and enforcement of authority over the management of data assets and the performance of data functions.*
- *Data Stewardship: The formalization of accountability for the management of data resources.*

At a high level, The PNWHF Framework Partners agree to adopt the following change management process in order to ensure that their stewardship responsibilities are fully met:

- Communicate all planned edits for lands under their jurisdiction to affected partners and stakeholders.
- Consider edits proposed by other agencies and organizations for lands under their jurisdiction and decide authoritatively if the change will be accepted or not.
- Recognize that overlapping stewardship responsibilities may exist between land management and regulatory Partner organizations.
- Communicate final decisions regarding proposed edits.
- Decisions can be appealed to the Theme Management Board for resolution.

**Role #1 PNWHF Steering Committee**

Definition: The Steering Committee ensures that PNWHF activities continue to meet the needs of the PNWHF Partners and Stakeholders. This group provides oversight on project activities, scope and direction, key issues with major implications to the project, timelines, project budgets, etc. It is comprised of the PNWHF Partner representatives and key stakeholders.

Responsibilities:

- Meet at least quarterly.
- Provide oversight on all PNWHF geospatial activities and projects in order to ensure that business needs of Partners and Stakeholders are met.
- Review and reach agreement on PNWHF project requirements and promote resulting projects within respective organizations.
- Provide review and promote funding support for PNWHF projects in their respective organizations. Identify and pursue available grant offerings.
- Resolve technical issues and concerns through positive negotiation in order to reach consensus on resulting decisions.
- Identify and maintain a contact list for PNWHF Stakeholders. On an ongoing basis, evaluate Stakeholder needs and expectations. Ensure that these needs and expectations are accounted for in PNWHF activities.
- Communicate status on PNWHF activities to all other identified PNWHF groups (defined below). Provide email notifications.
- Coordinate with State Framework organizations on geospatial hydrography issues.

**Role #2: Agency Data Steward**

Definition: The Hydrography Agency Data Steward has ultimate responsibility for all aspects of hydrography data production and maintenance for their organization. The Agency Data Steward enables Local Data Stewards and/or their data editors to locally coordinate and manage geospatial data and metadata production.

Responsibilities:

- Manages creation and maintenance of hydrography data/metadata within own organization.
- Ensures organization follows agreed-upon PNWHF data standards, protocols, and processes for providing data/metadata to the Clearinghouse.
- Communicates with participating partner organizations on planned data updates and maintenance and coordinates with other Agency Data Stewards to eliminate redundant and/or competing production/maintenance efforts.
- Coordinates with other PNWHF partners to ensure consistency in the implementation of data update standards and protocols.
- Provides vertical stewardship role in order to promote appropriate level of integration between hydrography and hydrographic unit boundary datasets.

- Promotes participation in the PNWHF.
- Encourages new data partnerships.
- Serves as organization's representative on the Theme Management Board.

### **Role #3: Local Data Steward**

Definition: The Local Data Steward is responsible for all aspects of hydrography data production and maintenance for their local jurisdictional area. The Local Data Steward either completes the work or enables their data editors to coordinate geospatial data and metadata production.

Responsibilities:

- Creates and maintain hydrography data/metadata within agreed-upon areas of responsibility.
- Follows agreed-upon PNWHF data standards, protocols, and processes for providing data/metadata.
- Provides vertical stewardship role in order to promote appropriate level of integration within the Hydrography Dataset.
- Communicates with other local data stewards in adjoining or overlapping areas of responsibility on planned data updates and maintenance.
- Coordinates data production/maintenance activities within own organization and with Local Data Stewards in other partner agencies/groups.
- Encourages new data partnerships.

### **Role #4: State/Agency Coordinator**

Definition: The states of Oregon and Washington are represented in the Partnership by the coordinating agency within each state. An individual will be appointed by the respective state to serve as the State Coordinator. Each federal agency partner will be represented in the Partnership by a Federal Agency Coordinator. The State/Agency Coordinator serves as liaison between the other State Partners, the Framework Partners, and the Clearinghouse Administrator. The State/Agency Coordinator serves as a point of contact so that the State or Agency Partners can effectively participate in the PNWHF Partnership.

Responsibilities:

- Represents the needs and views of their state or federal agency to the PNWHF Partnership.
- Serves as a conduit for information flow between the state or federal agency Partners and the PNWHF.
- Facilitates the review of PNWHF initiatives among the various state or federal agency Partners.
- Encourages cooperation between Partners in support of PNWHF initiatives.
- Encourages new data partnerships in support of PNWHF initiatives.

**Role #5: Hydrography Theme Management Board**

Definition: The Hydrography Theme Management Board (Board) provides an important leadership role for the PNWHF. Membership consists of the Agency Data Steward from each PNWHF Partner organization. Each organization has a seat on this Board. A chairperson will be appointed by the Board.

This Board ensures data consistency, coordination and protocol implementation for the PNWHF. It ensures consistency across the state(s) for the stewardship of the PNWHF Hydrography Dataset following agreed-upon protocols for communication and coordination. The Board resolves conflicts and issues that are brought forward by the Agency Data Stewards or the Clearinghouse Administrator that cannot be resolved at a lower level.

**Responsibilities:**

- Appoints a chairperson for the Board.
- Convenes meetings of the Board as needed. Promotes consistency in all aspects of the PNWHF implementation of the Hydrography Data (e.g. guidance on hydrography stream densification, required versus recommended attributes, etc).
- Resolves conflicts and issues that are brought before the board.
- Reviews requirements for additional PNWHF data development and functionality.
- Reviews requirements and procedures for the maintenance of the Hydrography Dataset.

**Role #6: Hydrography Framework Clearinghouse Administrator**

Definition: The Clearinghouse Administrator provides a variety of functions related to administrative oversight for the PNWHF Clearinghouse. Key responsibilities may include the following based on agreement among the Partners:

**Responsibilities:**

- Maintains appropriate links to Partner web sites and makes the PNWHF geospatial data holdings available to appropriate web portals.
- Provides Clearinghouse help desk/training assistance.
- Provides geographically referenced, up-to-date contact information for State/Agency Coordinators, Agency Data Stewards, Local Data Stewards, and Area Data Managers.
- Provides public distribution of regionally integrated PNWHF data and associated metadata according to agreed-upon standards and protocols.
- Implements appropriate system security.
- Notifies Agency Data Stewards, Local Data Stewards, State/Agency Coordinators, and editors of any system down time and expected recovery time.
- Provides email notification to Agency Data Stewards, Local Data Stewards, State/Agency Coordinators, and editors when updates have been posted to the Clearinghouse.

- Coordinates development or purchase of new or additional software/hardware when needed to meet the needs of PNWHF Partners and users.
- With Partner funding support, provides hardware/software infrastructure maintenance and upgrades for the Clearinghouse.
- Provides system/network administration for the Clearinghouse.
- Adheres to agreed upon PNWHF decision-making process.

#### **Role #7: Technical Advisory Committee**

Definition: The Technical Advisory Committee (TAC) consists of appointed technical experts in systems, networks, and hydrography data implementation. The TAC resolves technical issues that impact the PNWHF with respect to data quality, technical standards, application requirements, procedures, and protocols for data maintenance. The TAC committee provides technical recommendations to the Agency Data Stewards, Hydrography Theme Management Board, and the Clearinghouse Administrator.

##### **Responsibilities:**

- Meets as needed, usually as small work groups to solve specific PNWHF technical issues.
- Defines technical editing process/protocols.
- Defines security requirements for PNWHF database.
- Develops/maintains procedures for posting data to the PNWHF Hydrography Dataset. .
- Develops system network technical administration procedures.
- Identifies/develops tools for data integration including quality control/assurance.
- Provides support for application (or tool) enhancements.
- Develops procedures for implementing data requirements and functionality.
- Identifies hardware/software requirements.

#### **Role #8: Executive Guidance/Sponsors**

Definition: The Executive Guidance Sponsors role is comprised of advocates within each partner organization. Sponsors provide organizational leadership, policy direction, and oversight from the perspective of their organization. They have a vested interest in the successful development and maintenance of the PNWHF and are committed to providing an appropriate level of support for its success. Sponsors normally have decision authority (at the management level) and approve organizational and funding resources to support the PNWHF based on recommendations from the Theme Management Board.

##### **Responsibilities:**

- Provides necessary funding/resources.
- Provides oversight.
- Serves as advocate for PNWHF.



- Eliminates obstacles to success of PNWHF.
- Provides policy direction.
- Identifies appropriate decision making process.

Examples:

CIO of state/federal agency  
Executive Director for regulatory programs

### **Role #9: Stakeholders**

Definition: The group of individuals and organizations who are actively involved in the PNWHF effort, or whose interests may be positively or negatively affected by the results of the project. Different groups of stakeholders exist and their responsibilities vary by group. In addition, a complex relationship between the PNWHF Partners and their respective stakeholders exists. Below is a high level overall summary of the PNWHF Stakeholder role.

Responsibilities:

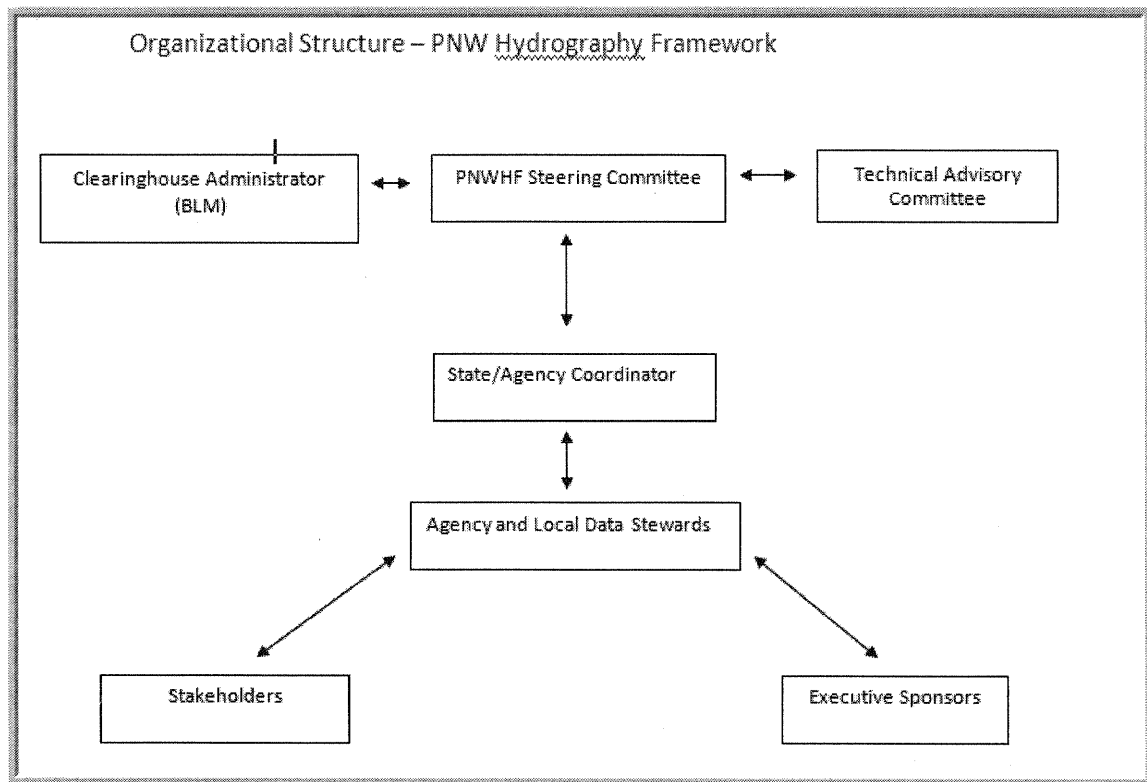
- Participates in the PNWHF effort at a level appropriate to the needs of their specific stakeholder organization in order to ensure that the project is successful from their point of view.
- As appropriate, provides input on requirements, scope, and direction of PNWHF initiatives.
- Responds to mailings and notifications where stakeholder input or feedback is requested.
- Provides funding to the PNWHF effort in response to anticipated benefits to be realized by their specific stakeholder organization as a result of successful implementation and ongoing management of these hydrography geospatial datasets.

Examples:

WA State Dept of Transportation  
US EPA  
OR Dept of Environmental Quality  
Tribes  
Counties  
Cities

## APPENDIX B Pacific Northwest Hydrography Framework Organizational Diagram

The following graphic provides a high level view of the PNW Hydrography Framework (PNWHF) organization. See Appendix A for detailed descriptions and associated responsibilities.



IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the last written date below.

*for* Michael Morris

Edward W. Shepard  
State Director  
Bureau of Land Management  
Oregon/Washington

1/21/09  
Date

*for* Isaac Fro

Mary Wagner  
Regional Forester  
U.S. Forest Service  
Pacific Northwest Region

1/28/09  
Date

Wm Petty

Dugan Petty  
Oregon State Chief Information Officer  
Chair, Oregon Geographic Information Council  
State of Oregon

2/12/09  
Date

Carol L. Fleskes

Carol Fleskes  
Administrative Services Director  
Department of Ecology  
State of Washington

2/27/09  
Date

Roylene Rides at the Door

Roylene Rides at the Door  
State Conservationist  
USDA Natural Resources Conservation Service  
Washington

3/23/09  
Date

*g* Ron Alvarado

Ron Alvarado  
State Conservationist  
USDA Natural Resources Conservation Service  
Oregon

03/17/09  
Date

